

# Mount Rainier National Park

# Sister Mountain Project

A Cultural Connection		
Overview	Mt. Fuji and Mt. Rainier have oral and written traditions that chronicle their local geologic events. As these stories are read, students interpret and illustrate their similarities and differences. Students should note key vocabulary words, facts, figures, and events to outline the volcanic processes from the past.	
Grade Level	5+	
Objectives	Students will:	
	Identify human and volcanic activities in the past 10,000 years	
	<ul> <li>Recognize the differences and similarities between the metaphe and other literary devices used to describe the mountains' ever and volcanic activities</li> </ul>	
	<ul> <li>Interpret and develop parallels between the two cultural tradition</li> <li>Understand contour lines and contour interval</li> </ul>	
Setting	Classroom	
Timeframe	<ul> <li>70 minutes</li> <li>Introduce Tribes and Peoples of Mount Rainier and Mt Fuji</li> <li>Explore Literary Interpretations of Geologic Events</li> </ul>	
Materials	<ul> <li>Introduce Tribes and Peoples of Mount Rainier</li> <li>Graphic of "Map of Native American Tribes Near Mount Rainier"</li> <li>Graphic of "Early Observer Views Mount Rainier and Lahar Spreadi over the Valley Floor"</li> </ul>	
	-Introduce the People of Mount Fuji	
	<ul> <li>Graphic of "Shogunate Period Map of Fuji"</li> <li>Graphic of "Hokusai's 'The Appearance of Hoeizan'"</li> </ul>	
	-Explore Literary Interpretations of Geologic Events	
	Copies of "Flood, Fire, and Fury- Native American Stories of Mou Rainier" student page	
	<ul> <li>Copies of "Flood, Fire, and Fury- Japanese Stories of Mount Fuji" stud page</li> <li>Copies of "Flood, Fire, and Fury- Discussion" teacher discussion questions</li> </ul>	
	copies of from first and fully Discussion where we would have been determined	

Standards	History:  1 – The student examines and understands major ideas, eras themes, developments, turning points, chronology, and cause-of-effect relationships in United States, world, and Washington history  1.1 – Examine the influence of culture on United States, world, and Washington history  Reading:  2 – The student understands meaning of what is read  2.1 – Comprehend important ideas and details  2.3 – Expand comprehension by analyzing, interpreting, and synthesizing information and ideas  Communications:  2 – The student communicates ideas clearly and effectively  2.1 – Communicate clearly to a range of audiences for different purpose - communicate using different forms of oral presentations  2.3 – Use effective delivery–speak at a volume and pace appropriate to the situation–use facial expression and body language to heighten and emphasize message
Background	This cross-cultural activity provides information about how some of the earliest human inhabitants in the Pacific Northwest and native Japanese people witnessed geologic activity of their local volcanoes. Native Americans used oral, rather than written, communication to pass down historical information, heritage, and traditions (see sidebar on "Story Telling as a Talent"). Japanese also relied on oral traditions, artistic expression through painting and handicrafts, and official government documents. In the late 1800s, printed travel journals became popularized throughout the world.  Living Under the Sacred Peak  The identity of the first residents around Mount Fuji is unclear, but the region around Fuji-san known as the Kanto plain was inhabited since the Jomon period which began 12,000 years ago. Similar to Mt. Rainier, Japan is experiencing geoscape changes at the end of the great Ice Age both culturally (with influences from mainland Asia) and geographically as shoreline and wildlife respond to the milder climate. As population boomed in southern and central Japan, the residents of the region survived a minor global cooling period by using advanced agricultural practices with native plants, rice, and domesticating a variety of animals. When you jump ahead in time, people of the Yayoi culture in 4th century BC to 3rd century AD lived in permanently settled communities, made up of thatched houses clustered into villages. As affluence increased, a class society began to emerge.
	One important aspect of Japan is to understand is that Buddhism and Shinto traditions viewed Mount Fuji as an embodiment of more than one god. Buddhism was brought to Japan around the 6 <sup>th</sup> century from China and Korea. Buddhist sutras were read to pacify the volcano that could provide either fire or water. Sengen Daibosatsu is one under Fujiko. Konohana Sakuya Hime is the goddess within Mount Fuji for Shinto traditions.

### Fuji's Eruptive History

After a major lava flow eruption in 864, Sengen shrines were built in places where the lava flow stoped and a cold water spring began. Since water is essential for the success of crops that supported a settled population, examples of these shrines exist today.

A holy man named Matsudai was the first recorded person to climb Fuji-san in 1149 since it was an active volcano with nine eruptions between 781 and 1083. Muyayama, on the southern side of the mountain, became the gateway for climbing Fuji-san and the center for 16<sup>th</sup> century Shugendo. In the Edo period, a majority of people view the mountain from Edo (Tokyo) on the north side of the mountain by the Yoshida gateway. Once popularized, Fujiko became a more popular religious practice.

The folklore that links volcanic eruptions and earthquakes to superhuman people and animals is varied and often embodied in a rich collection of poetry.

#### Native Americans Settle Near the Cascade Volcanoes

The first humans to live in the vicinity of the Cascade volcanoes arrived during a period of climatic warming at the end of the last great Ice Age approximately 10,000 years ago. Early inhabitants west of the Cascades encountered a landscape undergoing a vast transformation from glacial to vegetative cover. Gigantic glacial floods abated east of the Cascades, which permitted revegetation of freshly scoured land surfaces and river channels.

The first inhabitants consisted of foragers who ranged widely across the landscape and had the skills to obtain a variety of plants and animals from their local environments. Approximately 3,000 to 4,000 years ago, most people settled into villages along the waterways where they had easy access to their canoes and nearby food sources, especially salmon. Villagers became expert at seasonal harvesting and preserving.

#### Native Americans Witness Volcanic Eruptions

Volcanic activity at Cascade Range volcanoes has been frequent and dramatic throughout the last 10,000 years. Every volcano in the Cascades has lit the skies with their eruptions during the period between early Native American settlements and the present. Mount Rainier experienced remarkable changes during this timeframe. Hundreds of eruptions produced eruptions that enlarged the volcano. At one point, a large piece of the volcano disappeared during a giant landslide, but the mountain rebuilt itself. These and numerous eruption-produced mudflows buried valley floors as far away as 100 km (60 miles) distant!

The ancestors of people now affiliated with tribes such as the Cowlitz, Nisqually, Squaxin Island, Puyallup, Muckleshoot and Yakama observed many of these events and depicted them through stories in an attempt to understand the world. People on the west side of the Cascades told their stories in various dialects of the Salishan language, while those on the east side spoke in dialects of the Sahaptin

language. The name of the mountain varied with the dialect—Tacobed, Taqo'men, Takhoma, and Tahoma. These words are interpreted most often as "the mountain", but have also been expressed as "snow peak" or "water/young person".

The stories provided in this activity are just a few selected from broader collections available in local bookstores and libraries. They provide early human narratives about volcanic impacts in the Pacific Northwest—the same hazards that people face today.

## **Teacher Tips**

A venn-diagram would assist students to define the similarities and differences between the people surrounding Mt, Rainier in Washington and Mt. Fuji in Japan.

# **Introducing the Native American Tribes at Mount Rainier**

Introduce the Native American tribes that lived near Mount Rainier by using the map and teacher-led discussion.

- 1) Display the graphic entitled "Map of Native American Tribes at Mount Rainier". Use information in the background section and sidebars to guide students in a discussion about why they think Native Americans may have lived near Mount Rainier.
- 2) Point out the various Native American groups and their tribal symbols on the map. Tribal names represent the modern remnant of what was a more complex and more populous situation in the more distant prehistoric past.
- 3) Ask students to explain what the symbols tell us about features of importance to each Native American group.
- 4) Query students about why Native Americans ventured onto the slopes of Mount Rainier. What animals, plants, and rocks from Mount Rainier's slopes might these people have used?
- 5) Did Mount Rainier hold spiritual value? How does Mount Rainier hold value to inhabitants of the region today?
- 6) Discuss the definition and examples of metaphors. How might Native Americans have used metaphors in their stories about events?

## **Introducing the People of Mount Fuji**

Introduce the geography and history around Mount Fuji. Use the listed graphics or those found in the resource list.

- 1) Display the graphic entitled "Shogunate Period Map of Fuji". Use information in the background section and sidebars to guide students in a discussion about what happened during the Shogunate Period. Engage students in questions about the activities and livelihoods made around Mount Fuji.
- 2) Assist students to recognize the similarities and differenced between various Native American groups and their tribal symbols on the map with the symbols used at the sacred sites on Mount Fuji.
- 3) Query students about why Japanese people ventured onto the slopes of Mount Fuji. What animals, plants, and rocks may have travelers seen along their journey?
- 4) Discuss the definition and examples of myths and traditions. How are the

Procedure

myths about Mount Fuji and Rainier similar or different? Do people around both mountains find a spiritual connection personally or artistically today?

## **Exploring Local Interpretations of Geologic Events**

Choice is an important engagement tool in the classroom. Examine and interpret Native American stories and Japanese traditions about geologic events at Mount Rainier and Mount Fuji by making a storyboard.

- 1) Divide the class into small groups of 5 to 6 persons.
- 2) Give each group one or two copies of the stories in "Fire, Flood, and Fury" student activity sheet.
- 3) Instruct each group to read their story aloud within their group.
- 4) Choose the level of discussion and activity below that is most appropriate for your students. Timing is variable and depends on the choice made.

*Option 1:* Instruct students to make a storyboard depicting their story.

- Explain that a storyboard is a cartoon rendering of the story. The storyboard is divided into frames, and each one contains an illustration depicting a scene.
- The storyboard should include 2-5 illustrations of scenes from the story.
- Students decide which scenes to include that will depict their interpretation.
- *Option 2:* Direct students to make a storyboard, explain the storyboard to the class, then narrate or perform the story as a skit from their storyboard renderings.
- 5) Use the "Fire, Flood, and Fury" teacher discussion questions to foster additional thought.

## **General Questions**

- 1. What might scientists hope to learn from these stories?
  - a. Throughout many cultures, mythology and native stories provide very general information about geologic events including earthquakes and volcanoes. In some cases, the detail is great enough that the stories can indicate events where a geologic or physical record cannot be found.
- 2. What can we learn about Mt. Rainier and Mt Fuji volcanoes from these traditional stories? Why is this story important for us today?
  - a. It describes the types of things that happen when the volcano undergoes a change which includes eruptions, earthquakes, and lahar. All the stories shows that the volcanoes have had periods of activity and inactivity. Even though, they are inactive today, we can expect them to erupt again.
- 3. What characteristics match those of a volcano?
  - a. Fire- volcanic eruption or angry temper, Movement- earthquake or eruption event, Birth- new life change in volcano's landscape

# Suggested Assessment

- 4. How is the tale of the catfish similar to those of the Pacific Northwest?
  - a. Both stories talk of how the landscape changes unpredictably over time

### The Lake on Mount Rainier

- 1. Tacobed tells the grandfather that Tacobed's head will burst open. What does this mean? What will the water do? What does this mean for the land?
  - a. The lake on Tacobed will be drained and run down the flanks of the volcano. The water will travel down river valleys and carry debris that will be deposited onto the land.
- 2. Geologists know a large mudflow rushed from Mount Rainier, burst over the land, and flooded the present site of Orting around 500 years ago. Does this native story describe first-hand knowledge of the flood? How old do you think this story is?
  - a. The story does describe the mudflow that went through Orting, but is probably NOT first hand knowledge—the story was likely passed down by oral tradition. This story is probably a few hundred years old.

## Witnessing the Fire Goddess

- 1. The city of Fujiyoshida continues the tradition of bringing out the goddedss from the Fuji Sengen Shrine. What is the purpose oif the tradition? What does it mean for the city?
  - a. When visiting the city, Konohana Sakuya Hime no Mikoto is reminded of the value of the city and she should not cause the voilcano to erupt.
- 2. When Konohana Sakuya Hime no Mikoto sets fire to the parturition house, she and her triplet sons survive. What could the triplets represent when recalling Fuji's formation as a volcano?
  - a. The three is a symbolic number and once may have correlated to three of the better known phase of the volcano's development. Scientists have identified four distinct phases of volcanic activity in the formation of Mt. Fuji. The first phase, called *Sen-komitake*, is composed of an andesite core recently discovered deep within the mountain. The first well known phase, "*Komitake* Fuji," was a basalt layer believed to be formed several hundred thousand years ago. Approximately 100,000 years ago the second phase called "Old Fuji" was formed over the top of *Komitake* Fuji. The modern and third well known phase, "New Fuji" is believed to have formed over the top of Old Fuji around 10,000 years ago.

#### The Mountains

- 1. What characters represent the mountains and what are their relationships?
  - a. White Mountain or Patu is Mount Adams. He is the Husband of two wives—Taqo'men (Mount Rainier) and Mount St. Helens.
- 2. What do you think the fighting between these characters describes?
  - a. The fighting describes two mountains (Mount Rainier and Mount

- St. Helens) erupting at the same time.
- 3. What happens to Tago'men? What do you think that symbolizes?
  - a. Taqo'men gets hit in the head and her head falls off. This may symbolize the change in shape of Mount Rainier's volcanic cone caused by the volcanic eruption.

#### Namazu and Kashima

- 1. When the giant catfish, Namazu, moves through the mud, what is symbolized in real life?
  - a. Namazu's wiggling and trashing represents earthquakes below the ground (mud).
- 2. When Kashima is distracted from holding the keystone over Namazu's head, what does this signify? How does it relate to Mt Fuji?
  - a. Kashima's loosened grip allows earthquakes to occur. Earthquakes of different magnitude are linked to the subducting of the local plate or the movement of magma below the Earth's surface.

## The Husband and Wife Argument

- 1. What is the rumbling Xwa'ni heard? Where was it coming from?
  - a. Xwa'ni heard rumbling from Lawelatla (Mount St. Helens) and Takhoma (Mount Rainier). The two volcanoes were erupting (fighting).
- 2. Lawelatla blows her top. What does this symbolize? Takhoma's head is knocked off. What does that communicate?
  - a. Lawelatla blowing her top symbolizes Mount St. Helens erupting. Takhoma's head being knocked off describes how Mount Rainier 's volcanic cone changed shape after it erupted. The description may indicate that part of the volcano was removed by erupting into fragments or by collapsing from a landslide.
- 3. This very old legend describes simultaneous eruptions of Mount Rainier and Mount St. Helens. The story of twin eruptions was told long before scientists discovered physical evidence of their occurrence. How might the reports of these simultaneous eruptions be of value to scientists and planners who wish to prepare for future events?
  - a. The story indicates that Cascade volcanoes have eruptions simultaneously in the past; they could do so again in the future.

### Tacobed and Changer

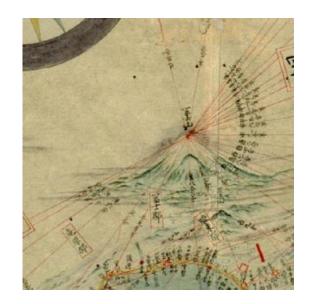
- 1. Native people respected and feared natural forces. Why do you think they created this story? How did this story help them understand nature?
  - a. They created this story to explain the origin of the two mountain ranges (the Cascades and Olympics) and to explain why Mount Rainier erupted in the past but not at the time when the story was told.
- 2. Why is Tacobed getting bigger?
  - a. Tacobed is getting bigger because it is erupting and depositing volcanic materials on its flanks.
- 3. What might have made native people change their opinion of Tacobed and

see her as a monster? a. An eruption that destroyed the land might have caused native people to change their opinion of Tacobed. 4. When Tacobed draws in a very deep breath, she bursts her blood vessels, and the blood gushes and pours down her sides. What does blood do for a body? Why does this native story see the gushing fluid as blood? Blood and hot lava can both be red. Blood gives the body life. The gushing fluid coming from Tacobed is described as blood because the life and activity of the mountain is taken away and the mountain becomes harmless. 5. The blood is changed into rivers of water. Why is water important? What promise does Changer make about the water? a. Water is necessary for humans to live. Changer promises Tacobed will remain harmless and the water will contain plenty of fish. The story tells how a volcano, after an active period, will become calm again. Wildlife and plants will return to the volcano's slopes and people will be able to live off what is provided. The Miser of Mount Rainier 1. The old man takes all the hiaqua he can find. Why does this make Sahale angry? What is the punishment? a. This made Sahale angry because he did not leave any hiaqua as an offering to the tamanowas powers that helped him discover the treasure. Sahale punished the old man by causing a great storm, burying the man in snow, sending demons, erupting fire and ash, and causing water to pour down the slopes of the volcano from the lake at the summit of the volcano. 2. What evidence in the story tells us Mount Rainier is a volcano? a. Sahale erupted fire (lava and pyroclastic flows) and the air became thick and hot (ash). Water flowed from the summit, which may have been the summit lake draining or lahars (mud flows). 3. What changes does he see in the mountain? a. The mountain shape changed after the eruption. Interview a fellow student, a family member, a student from another school about their experience with either mountain. Write a journal account of the experience or Adaptations record a local legend about one of the volcanoes. Include a sketch of scene, symbol, or wildlife creature that is connected to the journal account. Learn more about the Native Americans in your region or the people from the Shogunate Period in Japan. Use the library resources or complete a computer web quest. Interview people in your family about geologic events (i.e. volcanic eruptions, Extensions earthquakes, large floods) that they remember happening in their lifetimes. Use video, audiotapes, photos and written records to assemble a record of uncommon and extraordinary natural events that have occurred in your community. Write your own mythological experience at Mount Fuji or Mount Rainier. Include

	metaphors and other literary techniques as a way of capturing your readers attention.
	Ashenazi, Michael. 2003. Handbook of Japanese Mythology. Santa Barbara, CA: ABC-CLIO (Available online through Google Books)
	Carpenter, Cecelia Svinth, 1994, Where the Waters Begin: Northwest Interpretive Association, Seattle, 108 pages.
	Clark, Ella, 1953, Indian Legends of the Pacific Northwest: University of California Press, Berkeley.
	"Ino Maps." <u>National Diet Library Newsletter</u> 147Feb 2006 1 Aug 2008 Ino Tadataka / Takeo Konno. Tokyo: Shakai Shisosha, 2002. NDL call number: GK61-G69 Ino Tadataka to Nihon-zu / Tokyo Kokuritsu Hakubutsukan. Tokyo Kokuristu Hakubutsukan, 2003. NDL call number: YP6-H10
References/ Resources	Amerika ni atta Ino daizu to Furansu no Ino chuzu / Amerika Ino Daisu Ten Jikko Iinkai. Nihon Chizu Senta, 2004. NDL call number: G67-H14 <a href="http://www.ndl.go.jp/en/publication/ndl">http://www.ndl.go.jp/en/publication/ndl</a> newsletter/147/476.html
	City of Fujiyoshida, "Yoshida's Fire Festival." <u>Fujiyoshida Official City Website</u> . 2006. City of Fujiyoshida. 1 Aug 2008 <a href="http://www.city.fujiyoshida.yamanashi.jp/div/english/html/firefest.html">http://www.city.fujiyoshida.yamanashi.jp/div/english/html/firefest.html</a>
	Siebert L, Simkin T (2002-). Volcanoes of the World: an Illustrated Catalog of Holocene Volcanoes and their Eruptions. Smithsonian Institution, Global Volcanism Program Digital Information Series, GVP-3, (http://www.volcano.si.edu/world/).
	Smith, Henry D II. 1988. <u>Hokusai: One Hundred Views of Mt. Fuji</u> . New York: George Braziller, Inc., Publishers.
	"Shinto Shrines." <u>Japan Religion</u> . June 8 2008. Japan-Guide.Com. 1 Aug 2008 <a href="http://www.japan-guide.com/e/e2059.html">http://www.japan-guide.com/e/e2059.html</a>

## **Shogunate Period Map of Fuji**

On this map, the red radiating line from the top of Mount Fuji show how cartographers, like Ino Tadataka (1745-1818), applied a traditional oriental technique of cartography. The goal is to locate with accuracy certain points from which the mountain or an island can be seen by measuring the azimuth. Red seals show that this map was held by



## "The Appearance of Hoeizan" by Hokusai.

In this interpretation of the winter 1707 eruption, the artist combines the chaos of avoiding the disaster with detailed images of items from everyday life. The release of volcanic ash reached Edo (Tokyo today) about 100 km away. In the years followed, human shifts of the sediment, heavy rainfall with lahar flows, and natural flooding



### Witnessing the Fire Goddess

The origin of *Yoshido no Himatsuri* is based on the story of the Goddess Deity of Mt. Fuji "Konohana Sakuya Hime no Mikoto." After Konohana Sakuya Hime no Mikoto, Princess Blossoms of the Trees, marries her deity husband, Ninigi-no-Mikote, she quickly becomes pregnant after their marriage. She is accused of having an affair by Ninigi-no-Mikote. To prove her innocence, she locks herself in a room of the parturition house (shrine) and sets it on fire. Because she and the triplet children survive, it showed her dubious husband that the children are indeed his because only supernaturally would all four endure the heat and flames.

The flames made by the taimatsu torches at the Fire Festival represent the fire started by the Goddess of Mt. Fuji to prove her innocence. *Yoshida no Himatsuri* or Fire Festival starts on August 26th at Fuji Sengen Shrine in Fujiyoshida with the carrying of two large "omikoshi" portable shrines which holds the goddess' soul. The goddess enshrined in Fuji Sengen Shrine must be taken out of her home and carried around the streets of Fujiyoshida in order that she learns the value of the city, and decides to keep the volcano from erupting.

The festival continues with the lighting of giant torches in the street starting at the Kamiyoshida Community Center and continuing quickly up and down Honcho Dorii (street). On the 27th the Susuki Festival, the shrines are carried back to Sengen Shrine.

## **Teacher Tips**

Kaguya Hime, the immortal lady of Mt. Fuji, is another well known story. During the tale, a mortal local governor falls in love and lives happily for years. After she returns to the sacred mountain, he essential commits suicide by leaping into the volcano's crater due to his sadness and despite the magic mirror that allows him to see her.

In another tale, Ninigi no Mikoto, a heavenly grandsom of Amaterasu, is to be united by marrage with Konohana Sakuya Hime and Ihnanaga Hime (Pricess of Rock and Eternal Life). The princesses' father, Oyamatsumi no Kami, becomes angry at the rejection of Ihnanaga so that he received power, but not eternal life for rejecting the older and ugly sister.

## **Sidebar: Symbols of Buddhist and Shinto Temples**

The spiritual connection to Fuji-san has changed over time and most can be traced back hundreds of years. Shinto deity of Mount Fuji is Princess Konohanasakuya. Sengen Shrines are dedicated to her. Sacred objects of worship that represent this kami are stored in the innermost chamber of the shrine where they cannot be seen by anybody. For practioners of Buddhism, which was imported to Japan via China and Korea in the 6th century, the diety residing on the mountain is Dainichi Nyorai, the Buddha of All-Illuminating Wisdom. For many years, the two religions were able to co-exist and even complement each other. With the change in government systems, both religions adapted to the environment as one or the other was accepted as the state religion of the time period. Today, a modern Japanese person can identify with both practices and their connection to the mountain.

#### Samples of Buddhist Traditional Symbols



#### Sample of Shinto Traditional Symbols



#### **Gates**

Gates mark the entrance to the temple grounds. There is usually one main gate, and possibly several additional gates, along the temple's main approach.

#### Torii

One or more torii gates mark the approach and entrance to a shrine. They come in various colors and are made of various materials. Most torii, however are made of wood, and many are painted orange and black. At most shrines, you walk under the gate as a symbol of entering sacred space.

#### **Pagoda**

The pagoda, a structure that has evolved from the Indian stupa, usually comes with three (sanju no to)

#### **Purification trough**

Found near the entrance, the water of these fountains is used for purification. You are

or five (goju no to) stories. Pagodas store remains of the Buddha such as a tooth, usually in form of a representation. supposed to clean your hands and rinse your mouth before approaching the main hall. The purification process is specific to prevent contamination.

#### Main hall

The sacred objects of worship, such as statues, are displayed in the main hall. Main halls are called kondo, hondo, butsuden, amidado or hatto in Japanese.

# Main and offering hall

Depending on the shrine's architecture style, the main hall (honden) and offering hall (haiden) are two separate buildings or combined into one building. The main hall's innermost chamber contains the shrine's sacred object, while visitors make their prayers and offerings at the offering hall.

## Ojuzu

Meditation beads are a symbol of unity and harmony. The strand of beads represents many individuals connected in the association of life, the very core of Buddhist nature. There are two sizes: a chaplet has 108 beads; a shorter version has 21, 42 or 52 beads, which show numbers of passions, illusions and ignorance of human beings.

#### **Ema**

Shrine visitors write their wishes on these wooden plates and then leave them at the shrine in the hope that their wishes come true. Most people wish for good health, success in business, passing entrance exams, love or wealth.

## Bell

The bell is the common and essential musical instrument in the tantric Buddhism rituals. Deities and apotheosed lamas hold this symbol, along with the dorje in their hands.

The bell features an natural function and its sound is esteemed auspicious; it is also said to dispel evil spirits.

## Omikuji

Omikuji are fortune telling paper slips found at many shrines and temples. Randomly drawn, they contain predictions ranging from daikichi ("great good luck") to daikyo ("great bad luck"). By tying the piece of paper around a tree's branch, good fortune will come true or bad fortune can be averted.

#### Mandala

A mandala can also represent the entire Universe. Every intricate detail of these mandalas is fixed in the tradition and has specific symbolic meanings, often on more than one level.

#### **Shimenawa**

A shimenawa is a straw rope with white zigzag paper strips (gohei). It marks the boundary to something sacred and can be found on torii gates, around sacred trees and stones, etc.

#### Namazu and Kashima

Namazu-e © ERI, U. Tokyo

A giant catfish lived in mud beneath the Earth. The catfish liked to play pranks and could only be restrained by Kashima, a god who protected the Japanese people from earthquakes. So long as Kashima kept a mighty keystone rock with magical powers held over the catfish, the earth was still. But when he relaxed his guard or slacked his attention, the catfish thrashed about, causing earthquakes.

In Japan, several mythical animals struggles are linked with earthquakes and other natural disasters. In some older tales, earthquakes are caused by stirring dragons or serpents. After the Great Edo (Tokyo) earthquake of 1855, numerous prints of earthquakes and catfish were circulated. In this print, archived at Earthquake Research Institute, the University of Tokyo, the God of earthquakes (Kashima Deity) is pressing a large catfish with a keystone. Smaller catfish that caused earthquakes apologized to the Deity. This print was circulated as amulet to express the people's fear of earthquakes and a wish to put down Namazu (catfish).

